



UNITED STATES PATENT AND TRADEMARK OFFICE

147

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,113	08/27/2003	Craig C. Andrews	LYNN/0096	5887

24945 7590 01/19/2005

STREETS & STEELE
13831 NORTHWEST FREEWAY
SUITE 355
HOUSTON, TX 77040

EXAMINER

TANNER, HARRY B

ART UNIT	PAPER NUMBER
----------	--------------

3744

DATE MAILED: 01/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/650,113

Applicant(s)

ANDREWS, CRAIG C. *en*

Examiner

Harry B. Tanner

Art Unit

3744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) 29-43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/29/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Applicant's election without traverse of the invention of Group I in the reply filed on 11/12/04 is acknowledged.

Claims 29-43 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 11/12/04.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 3-27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does not disclose the method or apparatus for performing the processes recited in the claims. For example, there is no disclosure for measuring the effective surface area of the evaporator, varying the desired heat load to the evaporator as a function of the present capacity of the compressor, unloading the compressor, varying the rotational speed of the compressor, etc. The specification mentions that many of the processes claimed are conventional, however, applicant has not disclosed embodiments that include these processes nor shown how these processes are used to produce the claimed invention.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the means for

measuring the effective surface area of the evaporator, varying the desired heat load to the evaporator as a function of the present capacity of the compressor, unloading the compressor, varying the rotational speed of the compressor, controlling compressor capacity as a function of available power, unloading the compressor, cycling the compressor, determining the present capacity of the compressor, evacuating a low pressure reservoir during surplus power and controlling the feed water distribution must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 12 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Hanson. Hanson discloses controlling the effective surface area of the evaporator by controlling the flow of refrigerant to the evaporator as a function of the present capacity of the compressor which is varied by cycling the motor and unloading cylinders in response to heat load (see page 1, col. 1, lines 38-54).

Claims 1-3 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Anzalone. Anzalone discloses controlling the effective surface area of the evaporator by controlling the flow of refrigerant to the evaporator as a function of pressure of the evaporator (see col. 2, lines 7-24 and col. 3, lines 18-34).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-11, 13-17, 20-22 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanson as applied to claim 1 above, and further in view of admitted prior art. It is taken to be admitted prior art that the various means for controlling the compressor capacity recited in the claims are conventional in view of the lack of any disclosure of how to make and use said capacity control means. It would have been

obvious to one of ordinary skill in the art at the time the invention was made to have modified the system of Hanson such that it included the use such alternative means for controlling compressor capacity.

Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanson as applied to claim 1 above, and further in view of Hailey. Hailey teaches the use of an evaporator to produce ice in which the effective area of the evaporator is controlled in order to maximize the output of the compressor. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the system of Hanson such that it is used to produce ice in which the effective area of the evaporator is controlled in order to maximize the output of the compressor in view of the teachings of Hailey.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hanson as applied to claim 1 above, and further in view of Trepaud. Trepaud teaches controlling the position of water introduction conduits across the evaporator surface in order to produce ice. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the system of Hanson such that it is used to produce ice in which the position of water introduction conduits across the evaporator surface is controlled in view of the teachings of Trepaud.

Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanson in view of admitted prior art as applied to claim 17 above, and further in view of Trepaud as applied to claim 27 above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harry B. Tanner whose telephone number is (571) 272-4813. The examiner can normally be reached 8:30 am to 6:00 pm Monday, Tuesday, Wednesday and Friday and 2:00 pm to 6:00 pm Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Denise Esquivel, can be reached on (571) 272-4808. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Harry B. Tanner
Primary Examiner
Art Unit 3744